IN THE CLAIMS:

1. (Currently Amended) A recording medium comprising a graphies stream; wherein:

a graphics stream which represents an interactive display including a plurality of graphical button materials to be overlayed with a motion picture wherein: said graphics stream represents an interactive display to be overlayed with a motion picture made of a plurality of pictures, the interactive display including at least one graphical button material;

said graphics stream includes a plurality of pieces of graphics data sets

each forming a group of graphics data which renders a predetermined state of said

graphical button materials-that are grouped under state sets; and

the state sets respectively correspond to different states of the at least one button-material and are disposed in a sequential order.

said plurality of graphics data sets respectively renders different predetermined states of said graphical button materials.

(Currently Amended) The recording medium of Claim 1, wherein:
 <u>said different predetermined</u> [[the]] states are respectively a normal state, a
 selected state, and an active state; and

the state said plurality of graphics data sets are respectively a normal state set, a selected state set, and an active state set, and are disposed in an order of the a normal-state set, the a selected-state set, and the an active-state set.

3. (Currently Amended) The recording medium of Claim [[2]] 1, further comprising play list information, wherein:

> said play list information includes main-path information and sub-path information;

> said main-path information indicates a video stream as a main stream and defines a reproduction section of the main stream;

> said sub-path information indicates said graphics stream as a sub stream which synchronizes with said main stream, defines a reproduction section of said sub stream and includes reproduction information;

> said reproduction information indicates a synchronization point on a reproduction time axis of said main stream; and

> said interactive display is represented to be overlayed with a picture of said video stream in said reproduction section of said main stream.

> the graphics stream-further includes state control information-used to control the states of the at least one button material, the state control information being disposed in front of the plurality of pieces: of graphics data; and

> when a button material to be in a selected-state in an initial display of the interactive display by default is determined, graphics data constituting the selected state of the button-material to be in a selected state in the initial display is disposed first in the selected state set; and

> the state control information-includes specification information-used to specify the button material to be in a selected state in the initial display.

4. (Currently Amended) The recording medium of Claim [[2]] 3, further comprising a read-only optical disk, wherein:

> said video stream is recoded on a read-only optical disk; and said graphics stream and said video stream are recorded on said recording medium which is a rewritable disk,

> said-graphics stream further includes state control information-used to control the states of the at least one button material, the state control information being disposed in front of the plurality of pieces of graphics data; and

> when a button material to be in a selected state in an initial display of the interactive display by default dynamically changes, the state sets are not provided in any particular order; and

> the state control information includes specification information used to indicate that the button material to be in a selected state in the initial display by default dynamically changes.

5. (Currently Amended) A reproduction apparatus for reproducing a video stream and a graphics stream, said reproduction apparatus comprising:

a video decoder operable to decode the video stream into a motion picture made of a plurality of pictures; and

a graphics decoder operable to cause an interactive display to be displayed overlayed with the motion picture, the interactive display including at least one graphical button material;

wherein:

a graphics decoder operable to decode the graphics stream which represents an interactive display including a plurality of graphical button materials to be overlayed with a motion picture, wherein:

the graphics stream includes a plurality of pieces of graphics data that are grouped under state sets; graphics data sets each forming a group of graphics data which renders a predetermined state of the graphical button materials;

the state sets respectively correspond to different states of the at least-one button material and are disposed in a sequential order; and

the plurality of graphics data sets respectively renders different predetermined states of the graphical button materials; and

said graphics decoder uses the graphics data respectively belonging to a top set and a second-place set in the state sets, plurality of graphics data sets for presenting [[the]] an initial display of the interactive display, and uses the graphics data belonging to remaining ones of state sets the plurality of graphics data sets for updating the interactive display upon a user operation.

6. (Currently Amended) The reproduction apparatus of Claim 5, wherein: the different predetermined states are respectively a normal state, a selected state, and an active state;

> the plurality of graphics data sets are disposed in an order of a normalstate set, a selected-state set, and an active-state set;

said graphics decoder includes:

a graphics processor operable to decode the plurality of pieces of graphics data;

an object buffer operable to store a plurality of pieces of decompressed graphics data obtained by the decoding;

a graphics plane operable to store at least some of the pieces of the decompressed graphics data that are to be overlayed with the motion picture; and a control unit operable to:

enable-the-initial-display-of the interactive-display to be-presented by controlling to overlay, with the motion-picture, decompressed graphics data respectively belonging to the top state-set and the second-place state set which has been written to the graphics plane from said-object buffer; and

enable-the interactive display to be updated, by controlling to overlya, with the motion picture, decompressed graphics data belonging to the remaining ones of the state sets which has been written to the graphics plane from said object buffer.

a graphics controller operable to write the decompressed graphics data in a graphics data set for rendering the selected state to said graphics plane.

7. (Currently Amended) The reproduction apparatus of Claim 6, <u>further</u> comprising a video decoder which decodes the video stream and reads play list information recorded on a recording medium, wherein:

the play list information includes main-path information and sub-path information;

the main information indicates the video stream as a main stream and defines a reproduction section of the main stream, the video stream includes pictures;

the sub-path information indicates the graphics stream as a sub stream which synchronizes with the main stream, defines a reproduction section of the sub stream and includes reproduction information;

the reproduction information indicates a synchronization point on a reproduction time axis of the main stream; and

the interactive display is represented to be overlayed with a picture of the video stream in the reproduction section of the main stream.

the states are respectively a normal state, a selected state, and an active state; and

the state sets are respectively a normal state set, a selected state set, and an active-state set, and are disposed in an order of the normal state set, the selected state set, and the active state set;

the graphics stream further-includes state control-information used—to control the states of the at least one button material; and

when the state control information includes description specifying a button material to be in-a selected state in the initial display by default, the graphics decoder performs the initial display using (a) graphics data in the selected state set corresponding to the button material to be in-a-selected state in the initial display, and (b) graphics data in the normal state set corresponding to any other

button material than the button material to be in a selected state in the initial display.

8. (Currently Amended) The reproduction apparatus of Claim 7, wherein:

the video stream is recorded on a read-only optical disk; and

the graphics stream and the video stream are recorded on a recording

medium which is a rewritable disk.

said control unit, upon completion of decoding of the first graphics data of the selected state set, performs (i) clearing of the graphics plane, and (ii) reading from said object buffer, and writing to the cleared graphics plane (a) the graphics data in the selected state set corresponding to the button material to be in a selected state in the initially display, and (b) the graphics data in the normal state set corresponding to any other button material than the button material to be in a selected state in the initial display.

9. (Currently Amended) A recording method for recording to a recording medium, said method comprising:

recording the created application data to the recording medium; wherein:
the application data includes a graphics stream;

the graphics stream represents an interactive display to be overlayed with a motion picture made of a plurality of pictures, the interactive display including at least one a plurality of graphical button materials;

the graphic stream includes a plurality of pieces of graphics data that are grouped under state sets sets each forming a group-of graphics data which renders a predetermined state of the graphical button materials; and

the state sets respectively correspond to different states of the at least one button material and are disposed in a sequential order.

the plurality of graphics data sets respectively renders different predetermined states of the graphical button materials.

10. (Currently Amended) A program embodied on a computer readable medium for enabling a computer to reproduce a video stream and a graphics stream, said program comprising code operable to cause the computer to perform:

a decoding of the video graphics stream into a motion-picture made of a plurality of pictures; and

a display of an interactive display to be overlayed with a motion picture, the interactive display including at least one a plurality of graphical button materials;

wherein:

the graphics stream includes a plurality of pieces of graphics data that are grouped under state sets;

the state sets respectively correspond to different states of the at least one button material and are disposed in a sequential order; and

the graphics stream represents the interactive display to be overlayed with the motion picture;

the graphics stream includes a plurality of graphics data sets each forming a group of graphics data which renders a predetermined state of the graphical button materials;

the plurality of graphics data sets respectively renders different predetermined states of the graphical button materials; and

in-said-display, the graphics data respectively belonging to a top set and a second-place set in the state sets is plurality of graphics data sets are used for presenting an initial display of the interactive display, and

graphics data belonging to remaining ones of the state-plurality of graphics data sets is used for updating the interactive display upon a user operation.

11. (Currently Amended) A method of reproducing a video stream and a graphics stream which represents an interactive display including a plurality of graphical button materials to be overlayed with a motion picture, said reproduction method comprising:

> decoding the videographics stream; into a motion-picture made of a plurality of pictures; and

> displaying an interactive display to be overlayed with the motion picture, the interactive display including at least one graphical button material; wherein:

> the graphics stream includes a plurality of pieces of graphics data sets each forming a group of graphics data which renders a predetermined state of the graphical button materials that are grouped under state sets;

> the state sets respectively correspond to different states of the at least one button-material and are disposed in a sequential order; and

the plurality of graphics data sets respectively renders different predetermined states of the graphical button materials; and

in-said displaying, the graphics data respectively belonging to a top set and a second-place set in the state-sets-is plurality of graphics data sets are used for presenting an initial display of the interactive display, and uses the graphics data belonging to the remaining ones of the state sets plurality of graphics data sets is used for updating the interactive display upon a user operation.